

1
2 BEFORE THE
3 POLLUTION CONTROL HEARINGS BOARD
4 STATE OF WASHINGTON

5 IN THE MATTER OF)
6 INLAND FOUNDRY COMPANY, INC.,)
7)
8 Appellant,) PCHB No. 33-163
9)
10)
11 v.) FINAL FINDINGS OF FACT,
12) CONCLUSIONS OF LAW
13 SPOKANE COUNTY AIR POLLUTION)
14 CONTROL AUTHORITY,) AND ORDER
15)
16 Respondent.)
17)
18

19 This matter, the appeal from the denial of an application for a
20 variance from Sections 6.01, 6.04, and 6.08 of respondent's Regulation
21 I, came before the Pollution Control Hearings Board, Gayle Rothrock,
22 Chairman, David Akana (presiding), and Larry Faull, at a hearing in
23 Spokane, Washington, on October 20 and 21, 1983 and in Lacey,
24 Washington, on October 24 and 25, 1983.

25 Appellant was represented by its attorney, Louis T. Rogers;
26 respondent was represented by its attorney, Edward J. Parry, Spokane
27 Court Reporting in Spokane and Gene Barker and Associates in Olympia

1 recorded the proceedings.

2 Having heard the testimony, having examined the exhibits, and
3 having considered the contentions of the parties, the Board makes these
4 FINDINGS OF FACT

5 I

6 Inland Foundry Company (hereinafter "IFCO") was a proprietorship
7 operating a gray iron foundry in Mead, Spokane County, Washington
8 until June 6, 1983.

9 II

10 Inland Foundry Company, Inc., (hereinafter "appellant") a
11 corporation, purchased the assets of IFCO on May 29, 1983, and took
12 possession thereof on June 6, 1983.

13 III

14 Spokane County Air Pollution Control Authority, respondent, is a
15 municipal corporation activated under the Washington Clean Air Act,
16 chapter 70.94 RCW. The geographical jurisdiction of respondent is
17 co-extensive with the boundaries of Spokane County.

18 IV

19 In 1956, IFCO conducted business with five employees. By 1982, it
20 had expanded to 21 employees and served a market area including the
21 Pacific Northwest states and Alaska.

22 V

23 The central piece of process equipment at IFCO's (now appellant's)
24 facility is a cupola furnace. The cupola is charged with scrap metal
25 and coke. During combustion, the metal is melted and collected at the

again after some deliberation, it decided to engage

In 1980, IFCC began experiments involving air pollution problems

1.

11.

overly by demand, this involved the corporation's own committee, which

IFCC's employees and some residents did not consider the emissions

VII

ages, coughs, rashes, bronchitis, and/or indigestion among others.

observed. They also testified to headache, nose, stomachaches, burning

and dizziness outside after work. In addition, there were times when

emissions occasionally enveloped their properties and interfered with

background to the enjoyment of life. Many people, particularly, smoke

some residents in the vicinity of the boundary found the emissions

VIII

as an emission control device, which was incapable to respond,

was not acceptable to respondent in 1975, 1976 and a baghouse

proposed using a wet scrubber to control its emissions, the design

In the 1970's, IFCC began experimenting air pollution problems, in

IX

efforts to avoid oil vapor

also emitted, IFCC sought to use only clean gases from local

gases, dust, fumes, and smoke. There oil vapor is used, oil vapor is

The operation of the cupola produces all combustion's including

bottom where it is capped periodically,

1 | outside experts to advise it of its air pollution problems and
2 | possible solutions.

The consultants tested the emissions at the plant from the baghouse connected to the cupola. The test results for the emissions studied showed the presence of particulates, hydrocarbons, and sulfuric acid emissions.

8 | Page

The consultants proposed a four-step strategy to control the opacity emissions from the cupola. The first step was to control the process with some new equipment and to train employees in the operational procedures to be used on the furnace. The second step was to install another baghouse to assist the existing baghouse. The third step was to redesign the water quench system to produce smaller droplet size and control the water injection rates. The fourth step, the injection of reactive chemicals into the quench system, would be used only if the first three steps failed to reduce opacity successfully. The last step was the most expensive alternative for opacity control under the proposed strategy, according to IPCC. IPCC estimated that the fourth step alone would cost about \$155,000 to implement promptly.

• 1 •

Between April 27 and June 22, 1982, respondent issued 28 notices of violation to IFCO for opacity and/or odor.

-16 FINAL FINDINGS OF FACT,
CONCLUSIONS OF LAW & ORDER
PCAB No. 83-169

1 . III

2 By letter dated June 1, 1982, IFCO made application for variance
3 from Sections 6.02, 6.04, and 6.08 of Regulation I. The application
4 came for hearing before respondent's Board of Directors on July 1 and
5 6, 1982. At the conclusion of the hearing, respondent's Board denied
6 the application, which decision was appealed to this Board.

7 *I*

8 IFCO's evidence showed that the cost of promptly achieving the
9 fourth step of its strategy, \$155,000, as a start-up cost, given
10 its capitalization, present long-term debt, and annual profit
11 experience.

12 *II*

13 IFCO had completed the first three steps of its strategy at a cost
14 of between \$25,000 and \$35,000. The results of its efforts had not
15 been fully evaluated by it at the date of hearing in November, 1982,
16 however. IFCO wanted a variance to allow it flexibility if step four
17 was required. Although it initially sought a three-month time period
18 for the last step, it became uncertain to it whether the last step of
19 the strategy would be the best approach.

20 If IFCO were required to take steps beyond the first three steps
21 of its strategy, it would also consider an alternative to the cupola,
22 such as a new or used electric furnace of suitable design. The cost
23 of such a furnace would range between \$100,000 and \$250,000.

24 The decision to add more pollution control equipment or to replace
25 its furnace had not been made by IFCO in November of 1982.

1 | vi

2 | On January 25, 1983, this Board affirmed the denial of IFCO's
3 | request for a variance (See PCIB 1o 82-120.) During the time the
4 | IFCO's variance was pending before this Board, IFCO decided that the
5 | cost of adding more pollution equipment was too high. The use of some
6 | other technology was thought to be a better way to comply with the
7 | regulations.

8 | XVII

9 | On the first of March, 1983, IFCO was prepared to evaluate the
10 | results of the implementation of the first three steps of its control
11 | strategy. However, by letter of April 19, 1983, respondent notified
12 | IFCO of its continued non-compliance with the regulations.

13 | XVIII

14 | On May 10, 1983, IFCO placed a deposit with a manufacturer for a
15 | new or used electric furnace. Steps to upgrade electric service to
16 | the plant were also initiated in May.

17 | XIX

18 | On June 1, 1983, after its purchase of IFCO's assets, appellant
19 | notified respondent of its intent to install an electric induction
20 | heating system. Appellant also requested a variance from Sections
21 | 6.02, 6.04 and 6.05 of respondent's regulations. The requested
22 | variance from Section 6.02 was for startups (30 minutes), shutdowns or
23 | "hotdowns" (60 minutes) and "hangups." Later, appellant requested
24 | variance from the state regulations WAC 173-400-040(1 and 4).
25 | Appellant cannot operate in complete compliance with the regulations.

26 | FINAL FINDINGS OF FACT,

27 | CONCLUSIONS OF LAW & ORDER

2 On June 24, 1983, appellant made a ten percent payment on a new electric
3 induction melting system and was advised there would be a "lead" a
4 16-week period before shipment of the new equipment would occur.
5

ZT

6 On July 20, 1983, appellant submitted to respondent a Notice of
7 Construction, design specifications and drawings, and an environmental
8 checklist on this new system. Respondent did not consider the
9 submission complete at that time.

XIII

10 The estimated cost for the installation of an electric furnace is
11 \$235,000. Appellant has committed itself to the expenses of a new
12 system without the benefit of an "Approval of Construction" (Section
13 5.94 of respondent's Regulation I) for the new equipment, or a
14 variance from the applicable regulation during the period while the
15 old equipment is still operating and before the new equipment can be
16 operated.

ZTT

17 Appellant expects the new electric furnace to both avoid the
18 emission of air contaminants in the current and future condition
19 presently occurring from the cupola furnace, and to meet respondent's
20 regulations requirements. The electric furnace cannot be installed
21 instantaneously, however. The new furnace must be custom built,
22 transported, and installed at the site. The time requested to reach
23

1 full compliance with respondent's regulation--to February 28,
2 1984,--appears reasonable in view of the scale of the project and the
3 number of tasks involved.

4 'XI'

5 The cost of the new electric furnace is significant in terms of
6 appellant's assets, equity, and projected income. More importantly,
7 the cost of shutting down the cupola to achieve compliance until the
8 new furnace is installed involves closing the production of a going
9 business and turning away customers and suppliers from June 1983 to
10 February 1984.¹ Appellant's out of pocket loss could exceed
11 \$100,000, based upon its proforma profit and loss statement. This
12 loss is about 200 percent of its capital account.

13 'XV'

14 Appellant brings to Head, a source of employment for 37 people,
15 consumption of goods and services, and taxes. Appellant estimates its
16 economic contribution to the area at \$750,000 during the requested
17 variance period. About 63 people have some economic dependence on
18 appellant.

19
20
21 1. Although the variance request is evaluated from the time of its
22 application, the business would be shut down only after the variance
23 denial was affirmed or other action taken. This period is now
24 realistically not more than three months at most--December 1983,
25 January and February, 1984. These three months are the lowest
26 production months projected on appellant's proforma profit and loss
27 statement. Appellant could probably save more of its pocket costs by
completely shutting down during this period and, perhaps, make more
money. However, the maintenance of a going business, and its
infrastructure, has more significant economic importance than the
incremental amount of money made during the three month period.

Appellant's testimony and monitoring of the cupola furnace after the implementation of the three step strategy, established that visible emissions exceeding 20 percent opacity do not normally occur on startup. Emissions exceeding 20 percent opacity can occur during occasions when materials are caught (i.e., "hangup") in the cupola while such occasions are not unexpected in the cupola as it is designed and operated, their time of occurrence is not predictable. Finally, the testimony and monitoring showed that emissions exceeding 20 percent opacity could not be avoided during the "meltdown" or shutdown phase of the cupola operation.

Odor from the foundry is associated with the visible emissions. This was established that such odor can linger in sheltered areas long after the visible emissions have dispersed into the ambient air.

XVII

Appellant, like IFCO, is persuaded that the installation of an afterburner on the cupola would not solve its air pollution episodes.

Some odors and visible emissions probably come from sulfur compounds and hydrocarbons in the coke. An afterburner could burn hydrocarbons and oil in the cupola exhaust plume. However, it would not remove other pollutants from the exhaust gases. In particular, the afterburner may not eliminate odors, especially those coming from sulfur compounds. The cost of an afterburner for the cupola would range from \$50,000 to \$150,000 plus operating costs. It would take 45 days to order and substantial time for installation. It is not a

-1-

A EFFEKTIVE control apparatus and measure shall be
introduced and operated to a reasonable number
of cases and particularly where there is no
atmosphere to a reasonable number of cases and
wherever it is provided.

Section 6,92 of Regulation I provides:

"agent specially see also HAC 373-100-0400()."

It is the duty of the agent to make a full examination
and report, and same, to the Commissioner of Health
as soon as possible, in writing, of any case of disease
or infirmity, or any other condition which may require
attention in the community, and if found to be contagious
or infectious, to take all necessary steps to prevent
the spread of the disease, and to provide for the
proper treatment and care of the patient, and to person to
section 6,92 of Regulation I states that

"X"

Under section 6,92 of Regulation I it is the duty of the
agent to make a full examination and report, and to
take all necessary steps to prevent the spread of
any contagious or infectious disease, and to provide
proper treatment and care of the patient, and to person to
Dashed upon respondent's monitoring, the County's emissions do not
violate any regulation ambient air standards, or emissions do not
pose a risk of exposure based upon the emission

"Y"

Section 6,92 of Regulation I, operation,

to use in the time it appears to be possible to do so, continuing
thereafter, until it ends to remove the danger, exposing the population
and of transmission before the day following, to the
disease, and cause to continue to use the equipment during the
period of exposure to contain the disease, and to

"III"

accorded the benefit of the protection of the County's
measures to improve the classification of air quality in the County to

ensure and warrant the removal of any and all
dangerous disease in the County, and to the

least a degree in the County, and to the

1 B. The Board or Control Officer may establish
2 reasonable requirements that the building or
3 equipment be closed and ventilated in such a way
4 that all the air, gas, and particulate matter are
5 effectively treated for removal or destruction of
6 odorous matter or other air contaminants before
7 emission to the atmosphere.

8 See also WAC 173-400-040(1).

9 Section 6.08 of Regulation I provides for an exemption from
10 penalties for exceeding the emission limitations of Regulation I if
11 the exceedence is the direct result of unavoidable upset conditions or
12 unavoidable and unforeseeable breakdown of equipment or control
13 apparatus, the event is reported operationally in the next 24 hours,
14 and a report is submitted if requested by respondent. Upon
15 receipt of the report, respondent's control officer may allow
16 continued exempt operation under certain conditions or may require
17 the plant curtail or cease operations, under certain conditions.

18 Article III of Regulation I provides for a variance from the
19 provisions of Regulation I

20 A. Any person who owns or is in control of any plant,
21 building, structure, establishment, process or
22 equipment, including a group of persons who owns
23 or controls like processes or like equipment, may
24 apply to the Board for a variance from rules or
25 regulations governing the quality, nature,
26 duration, or extent of discharges of air
27 contaminants. The application shall be
28 accompanied by such information and data as the
29 Board may require. The Board may grant such
30 variance, but only after public hearing or due
31 notice, if it finds that:

32 I. The emissions, occurring or proposed to occur,
33 do not endanger public health or safety; and

1 | 2. Compliance with the requirements or regulations from
2 | which variances is sought would produce
3 | serious hardship without equal or greater
4 | benefits to the public.

5 | B. No variance shall be granted pursuant to this
6 | section until the Board has considered the
7 | relative seriousness of the pollution, other forms
8 | of property likely to be affected by the
9 | discharges, and the general order.

10 | C. Any variance or renewal thereof shall be granted
11 | within the requirements of subsection (1) for a
12 | time period and under conditions consistent with
13 | the reasons therefore, and within the following
14 | limitations:

15 | 1. If the variance is granted on the ground that
16 | there is no practicable means known or
17 | available for the adequate prevention,
18 | abatement or control of the pollution
19 | involved, it shall be only until the
20 | necessary means for prevention, abatement or
21 | control become known and available and
22 | subject to the taking of any substitute or
23 | alternate measure that the Board may
24 | prescribe.

25 | 2. If the variance is granted on the ground that
26 | compliance with the particular requirement
27 | or requirement from which variance is sought
28 | will require the taking of measures which,
29 | because of their extent or cost, must be
30 | spread over a considerable period of time, it
31 | shall be for a period not to exceed such
32 | reasonable times, as in the view of the
33 | Board, is requisite for the taking of the
34 | necessary measures. A variance granted on
35 | the ground specified herein shall contain a
36 | timetable for the taking of action in an
37 | expedition manner and shall be conditioned
38 | on adherence to such timetable.

39 | 3. If the variance is granted on a ground that
40 | it is justified to relieve or prevent
41 | hardship of a kind other than that provided
42 | for in Item 1 and 2, it shall be for not more
43 | than one (1) year.

1
2 E A variance or renewal shall not be a right of the
3 applicant or holder thereof but shall be at the
4 discretion of the Board. Any applicant adversely
5 affected by the denial of the terms and conditions
6 of the granting of an application for a variance
7 or renewal of the variance by the Board, may
8 obtain judicial review thereof only under the
9 provisions of Chapter 43.31A RCW.

10 * * *
11

12 From June 2 to August 4, 1983, respondent, through its staff,
13 issued five Notices of Violation to the applicant, for alleged
14 violations of Section 6.02 of Regulation I, Article VI, visual
15 emissions, and, during the same period, respondent has received
16 numerous complaints from residents in the vicinity of the foundry
17 concerning visual emissions and odors interfering with their enjoyment
18 of life and property in the vicinity of the foundry.
19

20 * * *

21 On August 4, 1983, respondent formally denied appellant's variance
22 request. It concluded that appellant did not meet the criteria of
23 Article III.A. Respondent also gave consideration to the interests of
24 the applicant, including applicant's projected losses if the variance
25 was denied, and concluded that they did not outweigh the
inconvenience, discomfort and unreasonable interference with enjoyment
of life and property by members of the public residing in the vicinity
of the applicant's foundry if the variance were to be granted.

The decision was appealed to this Board on August 18, 1983.

26 * * *
27

Any Conclusion of Law which should be deemed a Finding of Fact is

1 hereby adopted as one

2 from these findings of fact come the

3 CONCLUSIONS OF LAW

5 The Board has jurisdiction over the persons and subject matter of
6 this proceeding.

7 II

8 Appellant carries the burden of proving, by a preponderance of the
9 evidence, that the denial of the variance application was in error.
10 At issue in this matter are the particular requirements of Article
11 III, which provide:

12 The Board may grant such variance, if only after
13 public hearing or due notice, if it finds that:

- 1 The discharges occurring or proposed to occur do
not endanger public health or safety, and
2. Compliance with the rules or regulations from
which variance is sought would produce serious
hardship without equal or greater benefit to the
public.

18 If the foregoing findings are made in favor of granting a variance,
19 respondent's Board must nonetheless weigh the effect of the discharges
20 on the various interests involved.

21 A variance shall be granted pursuant to this section
22 until the Board be convinced of the relative interests
of the applicant, other owners of property likely to be
affected by the discharge, and the general public.

23 Article III.B

24 A variance is not a right of the applicant and is in his sole
25 discretion of respondent's Board of Adjustment, under Rule 70.04, U.

26 FINDINGS OF LAW,

27 CONCLUSIONS OF LAW & ORDER

1 III

2 The evidence is conflicting on whether the emissions resulted in
3 air pollution of such characteristics and duration as could
4 unreasonably interfere with enjoyment of life and property of
5 appellant's employees and nearby residents, resulting that either
6 party prevailed on such showing, the criterion to be met involves
7 danger to public health and safety.

8 Turning to the criterion at issue, we note that the evidence on
9 the part of both parties is essentially of the same quality. Although
10 some lay testimony presented by respondent suggests endangerment to
11 health, on balance, appellant showed by a preponderance of the
12 evidence that the emissions occurring, or proposed to occur, presented
13 no "endangerment" to public health or safety with respect to
14 exceedences of the limitations of sections 6.02 and 6.01 of
15 Regulation I.

16 IV

17 With respect to the criterion related to serious hardship,
18 appellant presented evidence which established that it would suffer
19 serious hardship if it were required to comply with sections 6.02 and
20 6.04 of Regulation I.

21 Appellant proposes a complete change in the method used to produce
22 cast iron. For the purposes of this variance request, the proposed
23 method appears to be superior to the method now used at the site.
24 Appellant has assumed this business risk. The cost of the new
25 electric furnace plus the cost associated with shutting down the

1 | production of a going business through continued coal produc-
2 |
3 | serious economic hardship to appellant. The harm suffered when
4 | the requested variance would be exacted would far exceed the
5 | cost of more air pollution equipment to the appellant furnace during the
6 | requested variance period. Eventually, dust or smoke with sulfur
7 | compounds will not be removed by the present or suggested air
8 | pollution equipment. The monetary benefits to the community is to be op-
9 | nated. It has not been overemphasized are the benefits to the
10 | public from the elimination of the cokela furnace from the production
11 | process and from which stem the basis of the express public concern
12 | and disconcern.

1 | V

1 | We conclude that appellant has met the requirements of Article

2 | III (1 and 2) with respect to its application for Sections
3 | 6.02 and 6.04 for the take down or "retirement" of the

4 | VI

5 | In making its decision, respondent's Board of Directors considered

6 | the relative interests of the applicant, the property property
7 | affected and likely to be affected by the discharges, and the general
8 | public. Article III (3) if appellant did otherwise than basic
9 | changes to its manufacturing process, to make agree with respondent's
10 | conclusion. Over the longer term, however, it is concluded that both
11 | appellant's and other property owners' interests would be better served
12 | if appellant were allowed once it is made certain the source of the
13 |

14 | PARTIAL FINDINGS OF FACT,

15 | CONCLUSIONS OF LAW

16 | PCIB No. 33-157

concern--the cupola furnace--in a manner which allows it to retain its viability as a business.

VII

Section 6.08 of Regulation I is an optional reporting provision which owners or operators can use to avoid penalties for having exceeded any limits established by the regulation. The section establishes no emission or other limits which could result in penalties. Consequently, a variance from the section is not appropriate. The provision is available for unavoidable dose, conditions or unavoidable and unforeseen breakdown of equipment or control apparatus. If reported startups and "hangups" meet the terms of the regulation, the owner may be exempted from penalties.

VIII

Appellant showed that some portions of its variance requests, i.e., the meltdown phase, met the criteria of Article III A and B. To such extent we conclude that respondent's decision was erroneous. The matter should be remanded to respondent to issue a variance from Sections 6.02 and 6.04 of Regulation I for the meltdown phase of appellant's operation, and to require a construction permit for compliance with a detailed time schedule commensurate with the satisfactory operation of the electric furnace. Such schedule should also include sufficient time to complete the validation of appellant's Notice of Construction. During the variance period, respondent may require that appellant meet an interim standard of performance in terms of opacity and its duration, and that the equipment be so

1 | operated and maintained that air pollution emissions are minimized
2 | Finally, appellant's mettballing of the cupola furnace after the
3 | electric furnace is in operation should be carefully authorized.
4 | Conditions of any future operation of the cupola furnace should be
5 | clearly understood

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9 |
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11 |

7 | Variances from WAC 173-400-140(1 and 4) are provided for in WAC
8 | 173-400-150. Subsection 2 thereof provides that variances granted by
9 | an air pollution control board for sources under its jurisdiction are
10 | accepted as variances to the state regulation.

12 | Any finding of fact which should be deemed a Conclusion of Law is
13 | hereby adopted as such.

14 | From these Conclusions the Board enters this

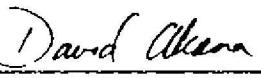
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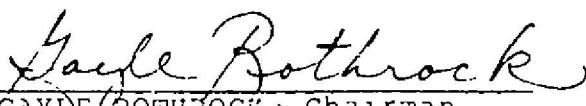
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2 ORDER
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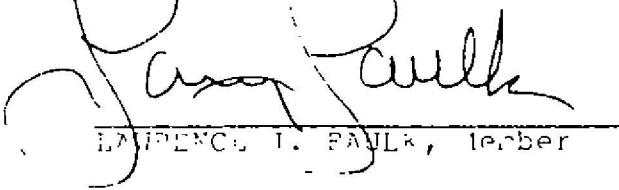
4 The decision of the Spokane Air Pollution Control Authority is
5 reversed as to the requested variance from Sections 6.02 and 6.04 of
6 regulation I during the shutdown or "meltdown" phase of the cupola
7 operation and is remanded for issuance of a variance for such action
8 in all other respect, the decision is affirmed.

9 DATED this 20th day of December, 1983.

10 POLUTION CONTROL HEARINGS BOARD
11

12 
13 DAVID AKANA, Lawyer Member

14 
15 GAYLE BOTHROCK, Chairman

16 
17 LAWRENCE T. FAULK, Member